

REMARKS

The Office Action mailed November 14, 2003, has been carefully reviewed. The amendments made as directed above are in response thereto.

Claims 1 - 4, 8 – 9 are all currently amended.

Claims 1 and 8 stand rejected under 35 U.S.C § 112, first paragraph as allegedly containing subject matter not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and use the invention.

Claims 1 and 8 stand rejected under 35 U.S.C § 112 second paragraph as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Claims 1, 2, 4, and 6 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative as obvious under 35 U.S.C. § 103(a) over Scholz et al., U.S. 5,512,354.

Claims 3 and 7 also stand rejected as allegedly obvious under 35 U.S.C. § 103(a) over Scholz et al., U.S. 5,512,354.

In the Office Action, the Examiner objected to the priority reference to a foreign application. The objectionable reference has been deleted. Also, on page three of the Office Action, the Examiner stated that “the Applicant’s use of the term “layer” is contrary to the accepted meaning in general, and in knit art, in particular.” According to the Examiner, “in the knitting art, “layers’ implies a fabric such as a double knit having two layers of fabric interknitted together.” In the Examiners assessment, whenever multiple layers of fabrics are interknitted together, the result is a single layer of interknitted fabric. As the Examiner is aware, warp knitting involves knitting on machines where interlocking loops are formed in the lengthwise direction. As a result, warp knits tend to be flatter, smoother, more run resistant, and

more stable than weft knits or mechanized hand knitting where one strand of yarn runs across, forming a horizontal row of interlocked loops. As such, Applicants respectfully do not share the Examiner's assessment that warp-knitting cannot result in the three layered material of the present invention. Nevertheless, in order to advance the prosecution of this application, Applicants have replaced all instances of the words "layer" or "layers" in the specification with the words "ply" or "plies", thus necessitating the new substitute specification. As mentioned in detail below, the use of a three-bar knitting machine to attain the three-ply warp knit fabric of the present invention is within easy and ready reach of one of ordinary skilled in the art.

Also, the claims as amended herein are fully supported by the application as originally filed. Again, no new matter is believed to have been added. Reexamination, reconsideration, and allowance of the present application are respectfully requested in view of the foregoing amendments and the following additional remarks.

Rejections Under 35 U.S.C. § 112, first paragraph

Claims 1 and 8, and claims 2 to 7 and 9 depending therefrom, stand rejected under 35 U.S.C. § 112 first paragraph as allegedly containing subject matter not described in the specification in such a way as to enable one skilled in the relevant art to make and use the invention. In particular, the Examiner claimed that the specification did not disclose how warp knit fabric is constructed to have a front, rear surface and intermediate layers. According to the Examiner, "the point is not what the three layers are formed from, but how the "layers" or yarns are structurally related." Applicants respectfully disagree with the Examiner's contention.

First, in order to advance the prosecution of this application, especially in the light of the difficulties which the Examiner has expressed with the word "layer", Applicants have amended

the specification to use the word “ply” instead. Accordingly, the warp knit of the present invention is a single “layer” knit fabric having a front ply of ultra fine yarn, an intermediate ply of spandex and a rear ply of synthetic yarn.

As stated, the use of three-bar knitting machine to construct such a warp knit is within such easy and ready reach of one of ordinary skill in the art that the specification need not be burdened with those details. For instance, the warp knit fabric of the present invention can be produced by feeding the ultra fine yarn wound on the first beam of the first feeding bar (L1), the elastic yarn wound on the second beam of the second feeding bar (L2), and the synthetic yarn wound on the third beam of the third feeding bar (L3) of the three bar knitting machine such that the yarn passing the L1 feeding bar constitutes the front ply, the yarn passing the L2 feeding bar constitutes the intermediate ply, and the yarn passing the L3 feeding bar constitutes the rear ply, wherein the yarns of the three plies are bound together by a common knot.

Since a person of ordinary skill in this age-old art would readily know and understand how warp knit fabric is constructed to have three plies, claims 1 and 8 are enabled. In the Examiners view, “nowhere in the specification is this product enabled for a three bar knitting machine.” It is, however, well settled that known details need not be included in a patent specification. See *In re Eligroth* 419 F.2d 918, 921, 164 USPQ 221, 223 (CCPA 1970). Applicants respectfully re-assert that the product as claimed is adequately enabled on the basis that the details are already well known. It is especially hoped that the reference to plies as opposed to layers more clearly conveys the structural relationship of the three plies and obviates this present ground for rejection which Applicants respectfully ask that it be withdrawn.

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1-9 stand rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention. The Examiner asserts that the Applicant has not amended claims 1 and 8 to be consistent with the accepted meaning of a warp knit.

Applicants have amended the said claims to refer to plies instead of layers with the hope that said amendment accords more with the Examiner's understanding of a warp knit in order to advance the prosecution of the present application. Applicants respectfully urge the Examiner to depart from her assessment that the present invention is directed to "a warp knit comprising ultra fine, elastic, and synthetic, or high shrinkage yarns in any structural combination." The structural relationship between the yarns of the present three-ply warp knit fabric is specifically defined.

As mentioned in claim 1, the three-ply warp knit of the present invention consists of three plies with the front ply consisting of ultra fine yarn which is raised, an intermediate ply consisting of spandex elastic yarn and a rear ply consisting of synthetic yarn, the "excellent touch" of this warp knit being due to the raised ultra fine yarn of the front ply.

Further, as is abundantly clear in the specification (See for example "Summary of the Invention" page 3, lines 15-20), the front layer is made of ultra fine yarn, the intermediate layer is made of spandex and the rear layer is made of regular synthetic yarns. Further, as stated above, this Application is not limited by the knitting method used. One of skill in the art is reasonably apprised of the use of three-bar knitting machine to make a three-ply knit fabric. Again, claim 1 is directed to the constituent material of the warp knit fabric and is not limited by

how to fashion those materials into a knit fabric, said know how being old and notoriously well known in the art.

As is well settled, claims need only “reasonably apprise those skilled in the art” as to their scope and be “as precise as the subject matter permits.” Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986), *cert denied*, 480 U.S. 947 (1987). Thus, “if the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, section 112 demands no more.” Credle v. Bond, 25 F.3d 1566, 30 USPQ2d 1911 (Fed. Cir. 1994). Applicants believe that the foregoing has adequately dealt with the 112 issues raised by the examiner and as such respectfully request the withdrawal of this ground for rejection.

Rejections Under 35 U.S.C. § 102/103

Claims 1, 2, 4 and 6 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 (a) as obvious over Scholz et al., U.S. 5,512,354. It is understood from the Office Action that the Examiner maintains this ground for rejection because on the basis of the 112 first and second paragraph issues raised by the Examiner above, the Examiner deems the current invention to comprise ultra fine, elastic, and synthetic yarn in any structural combination.

Applicants believe that the 112 rejections have been adequately addressed. Applicants have pointed out that the claims are directed to a warp knit consisting of ultra fine, elastic and synthetic or high shrinkage yarn in a specific structural combination – namely that the front ply, the intermediate ply and the rear ply are respectively made of ultra fine, spandex and synthetic

yarns. In that respect, Applicants hereby restate that their invention is patentably distinct from that of Scholz et al.

In the previous Office Action, the Examiner asserted that Scholz et al. is directed to a knit fabric comprising a nonfiberglass microdenier yarn in combination with a heat shrinkage yarn or a stretch yarn, and alternatively a stiffness controlling yarn – said fabric made for use in orthopedic applications such as casting materials.

As is well settled, for a prior art reference to anticipate under 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference and these elements must be arranged as in the claim under review. In re Bond. 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). As the Examiner pointed out, Scholz et al. teaches that the backing layer, nonfiberglass microdenier yarns are formed from fibers or filaments having a diameter of no greater than 1.0 denier (Column 7, 1-10). On the other hand, the rear surface ply of the present invention is made of synthetic yarn with monofilament denier of 1 to about 5 denier. More particularly, whereas the front surface of Scholz et al. is made of high shrinkage yarn, that of the present invention is made of ultra fine yarn. For at least that major distinction between the present invention and the prior art, a 35 U.S.C. § 102 rejection does not apply.

In fact, the present invention is patentably different from the prior art in object, effect and constitution. The object of the present invention is to create warp knit fabrics with exquisite touch to be used in clothing and synthetic leather. On the contrary, the object of the cited prior art is to improve formability and conformability backings for orthopedic immobilization devices and its materials are reasonably adapted to that end. In fact, to ensure the impregnability of its material with resins, the fabrics of Scholz et al. are apertured and basically functions as a backing for said immobilization devices. (Column 6, lines 30 –35). In contrast, the materials of the

present invention are designed for softness, draping property, writing effect and appearance and are adapted to that end. As such, it is unreasonable for the Examiner to assert that the recovery rate of the materials of the present invention, a deficiency admittedly not taught by Scholz et al., is inherently to be assumed.

Applicants differ strongly with the Examiner in terms of the characterization of the Scholz et al.'s invention. In particular, whereas the present invention teaches a three ply knit fabric, Scholz et al. teaches a two layered fabric and further adds that an elastic stretch yarn may be knitted into the fabric under tension to provide some degree of compaction as the knit relaxes off the knitting machine. The augmentation of Scholz et al.'s two-layered material with an extensibility-imparting material is clearly not the same as a three-ply warp knit fabric. However, assuming for the sake of argument that Scholz et al. teaches a three ply warp knit fabric, which it does not, the following differences in constituent materials can be deduced.

Item	The Present Invention	Scholz et al.
The surface (front) ply	Ultra fine yarn	High Shrinkage Yarn
The Intermediate ply	Spandex yarn	Monofilament yarn
The back (rear) ply	Synthetic yarn (1 to about 5 denier)	Microdenier yarn (less than 1.0 denier)

The differences in constitution and arrangement between Scholz et al. and the present invention are evident. Applicants have not seen any suggestion, express or implied, in Scholz et al. to suggest that the invention of claims 1, 2, 4 and 6 can be arrived at by substituting the microdenier yarn of Scholz et al. (less than 1.0 denier) with the synthetic yarn of the present invention. In particular, the high shrinkage yarn so critical to the formability and conformability

of the fabric of Scholz et al. cannot merely be replaced by the ultra fine yarn of the present invention – so critical to its touch and feel. Nor is the fabric of the present invention interspersed with apertures – the use of which is critical to Scholz et al. In fact, Scholz et al. teaches away from the touch, feel, drapability and smoothness of the fabric of the present invention and instead teaches formability and conformability which implies flexibility with some measure of rigidity that is neither contemplated nor taught by the present invention. Moreover, the fact that a prior art could be modified so as to produce a claimed device is not a basis of an obviousness rejection unless the prior art suggested the desirability of such a modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). For at least the fact that Scholz et al. did not suggest the desirability of so modifying the constituent elements of their invention to arrive at the present invention, Applicants contend that their invention is patentably unobvious over Scholz et al. Applicants respectfully request the withdrawal of this ground for rejection.

Rejections Under 35 U.S.C. § 103

Claims 3 and 7, both dependent on claim 1, stand rejected as obvious over Scholz et al. Since, as has been discussed above, independent claim 1 is patentably unobvious over Scholz et al., these rejections are now moot. Applicants respectfully request their withdrawal.

CONCLUSION

In view of the foregoing remarks, Applicants submit that there is no basis for applying the previous rejections to the pending claims and withdrawal of the rejections is respectfully

requested. The claims are believed to be in condition for allowance, and Applicant earnestly solicits from the Examiner early notification of allowability.

Should the Examiner have any questions or believe a personal or telephonic interview may be in order, he is invited to contact the undersigned at his earliest convenience.

Respectfully submitted,

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